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to the Commissioner of Patents and Trademarks, Washington, D. C. 20231.

IN THE UNITED STATES PATEN

Docket No.: APXX0003

EMARK OFFICE

Serial No.: 09/542,854 Art Unit: Unassigned

Filed: 4/4/2000 **Examiner:** Unassigned

Title: METHOD AND SYSTEM OF MANAGING AC POWER NETWORKS BASED

UPON FLOW-GATE MARKET TRANSACTIONS

July 5, 2000

Assistant Commissioner for Patents

In re Application of: Cazalet et al.

Box DAC/ Pet. Make Special

Washington, DC 20231

Petition to Make Special pursuant to 37 CFR 1.102

- 1. Special status is being requested for the above-cited application based on the following items:
- 2. All claims presented are directed to a single invention. Claims 1 to 24 are directed to a method for contracting AC power transfer on an AC power network with a flow gate collection. Claims 25 to 51 are directed to a program operating system supporting with program code segments contracting AC power transfer on an AC power network with a flow gate collection. Claims 52 to 51 are directed to a computing system supporting a program operating system with program code segments contracting an AC power transfer on an AC power network with a flow gate collection.



- 3. The invention materially contributes to the conservation of energy through optimizing the control of the distribution of electrical power through the national power grids pursuant to 37 CFR 1.102(c) as found in the electronic version of the MPEP Seventh Edition Rev. 1, Feb., 2000. Pursuant to 37 CFR 1.102(d), no petition fee is sent herewith.
- 4. A pre-examination search was made covering U.S. Patents, European Patents and Patent Applications, Japanese Patent Abstracts and Chinese Patent Abstracts, as well as those databases in the Derwent system. The search was initially confined to Class 705, but was not limited just to that class.
- 5. One copy of each of the references deemed most closely related to the subject matter encompassed by said claims is attached.
- 6. This document is submitted pursuant to Applicant's petition To Make Special files in connection with the above-identified patent application pursuant to 37 CFR § 1.102 and MPEP § 708.02 VIII. The following sets forth a detailed discussion of each reference identified in the pre-examination search conducted as a prerequisite to Applicant's Petition To Make Special.
- <u>U.S. Patent 5,794,212</u> of Mistr teaches a method providing communication between energy suppliers, energy purchasers and transportation providers having an administrator to assist in the transmission of energy as necessary for timely movement of energy. The method connects an energy supplier, connects an energy buyer, connects a transmission supplier and the administrator through a network, the method further includes receiving energy information from those connected, processing and storing that information, verifying the reliability of the energy transportation, providing access to the energy information stored in a connected database to assist the buyer in negotiating for the energy transportation, communicating the buyer acceptance to the energy supplier and transmission supplier. The method further includes invoicing the transmission of energy and paying the energy supplier and transmission supplier for

the transmission. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer.

<u>U.S. Patent 5,799,151</u> of Hoffer teaches an interactive network integrating distributive messaging using a host computer and networks, real-time interactive communications, a heirarchical knowledge matrix containing two familiar and comprehesive indices od classes of goods and classes of establishments and a legend of trade-related, cross-reference terms or parameters, a multiline programmable application, an integrated application program interface and integrated application programs. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer.

<u>U.S. Patent 5,870,140</u> of Gillberry teaches a system of remote meter viewing and reporting. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to measure power usage.

<u>U.S. Patent 5,897,607</u> of Jenney et al. teaches a method and apparatus for measuring use of a commodity and for transmitting the measurement over a global computer information network to a remote location. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to measure power usage.

<u>U.S. Patent 5,905,975</u> of Ausubel teaches a computer implemented system and method of executing an auction. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer.

<u>U.S. Patent 5,924,486</u> of Ehlers et al. teaches an indoor environmental condition control and energy management system including an energy price receiving a projected energy unit price per time period schedule. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

<u>U.S. Patent 5,933,355</u> of Deb teaches a power line amapacity system invented by object oriented modeling and expert rules of the power line environment. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

<u>U.S. Patent 6,021,398</u> of Ausubel teaches a computer implemented system and method of executing an auction. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

E.P.O. 0 893 775 A1 of Takriti, et al. teaches a computer implemented tool forecasting the spot price of electric power and amounts that may be traded in a deregulated market. These forecasts are made for different delivery points, providing probabilistic distributions for spot prices and trading allowing risk management of the power supply within a electricity network. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

Cazalet & Samuelson "E-Commerce for All Electricity Products", Public Utility Fortnightly, 2/1/2000 has been included to document a public disclosure of the Applicant made between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and the filing of this Patent Application. Provisional Patent Application No. 60/158,603 is relied upon for its priority filing date. While this

material is not viewed by the Applicants as creating any bar under 35 U.S.C. §102 to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Printout showing the web site <u>www.houstonstreet.com/home.asp</u>, taken 10/8/1999 has been included to demonstrate the state of the prior art at approximately the time of filing Provisional Patent Application No. 60/158,603, filed October 8, 1999. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

Print-out from Avista Corporation Home Page, taken 10/8/1999 has been included to demonstrate the state of the prior art at approximately the time of filing Provisional Patent Application No. 60/158,603, filed October 8, 1999. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

Printout from www. Bloomberg.com, taken 10/8/1999 has been included to demonstrate the state of the prior art at approximately the time of filing Provisional Patent Application No. 60/158,603, filed October 8, 1999. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

"Flowgate Market." APX handout dated 1/28/2000 has been included to document a public disclosure of the Applicant made between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and the filing of this Patent Application. Provisional Patent Application No. 60/158,603 is relied upon for its priority filing date. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor. There is some question about the exact date of this document, however, the reference on the first page to Automated Power Exchange being located in Santa Clara, CA indicates that it was generated no earlier than December 15, 1999 according to John Stremel, one of the applicants.

Stremel, J. "A Market Solution to Intra-zonal and Inter-Zonal Congestion" APX handout taken from 4/3/2000 has been included to document a public disclosure of the Applicant made between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and about the time of the filing of this Patent Application. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Cazalet, E. "Competitive Markets for Energy, Transmission and Ancillary Services", APX handout, 10/18/1999 has been included to document a public disclosure of the Applicant made between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and the filing of this Patent Application. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Samuelson, R. "Flowgate Transmission Demo", APX handout, 4/6/2000 has been included to document a public disclosure of the Applicant. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Stremel, J. "Liquid Transmission Markets, A how-to guide", APX handout, 11/11/1999 has been included to document a public disclosure of the Applicant made between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and the filing of this Patent Application. Provisional Patent Application No. 60/158,603 is relied upon for its priority filing date. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Samuelson, R. "Transfer Distribution Factors Walkthrough of material from NERC website", 4/7/2000 has been included to demonstrate the state of the prior art as found on the NERC web-site between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and the filing of this Patent Application. This document was prepared to show the level of understanding of the physics regarding transfer distribution factors as found on the NERC web-site. This material was put

together due to the extensive nature of the web-site documentation (several hundred pages of written reports and several multiple-megabyte Excel spreadsheets) to present the Applicants' understanding of that web-site's contents and significance as part of fulfilling the Applicants' Duty of Candor. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

Samuelson, R. "Compilation of material from NERC web-site", downloaded before 12/13/1999, printed 3/7/2000, with a cover letter explaining the contents entitled "Prior Work on Flow Based Transmission Management" signed by Ralph Samuelson. has been included to demonstrate the state of the prior art as found on the NERC web-site between the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999 and the filing of this Patent Application. This document was prepared to show the level of understanding of the physics regarding transfer distribution factors as found on the NERC web-site. This material was put together due to the extensive nature of the web-site documentation (several hundred pages of written reports and several multiple-megabyte Excel spreadsheets) to present the Applicants' understanding of that web-site's contents and significance as part of fulfilling the Applicants' Duty of Candor. The publication does not teach trading flow gate transmission rights as a basis for AC power transfer or use of such trading or trading information to plan power usage.

Cazalet, E. "Independent For Profit Power Exchanges and RTO Lite", APX handout, 5/28/1999 has been included to document a public disclosure of the Applicant made before the filing of the Provisional Patent Application No. 60/158,603, filed October 8, 1999. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Birman, et. al., Chapter 1, "Introduction", Reliable Distributed Computing with the Isis Toolkit, ISBN 0-8186-5342-6, © 1994 has been included to demonstrate the state of the prior art as found in the distributed computing environments. While this material is

not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

Birman, et. al., Chapter 11, "Reliable Communication in the Presence of Failures", Reliable Distributed Computing with the Isis Toolkit, ISBN 0-8186-5342-6, © 1994 has been included to demonstrate the state of the prior art as found in the distributed computing environments. While this material is not viewed by the Applicants as creating any bar to the patentability of the invention, it is included by the Applicants to address the Duty of Candor.

7. I herein acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon. All statements made of my own knowledge are true and all statements made on information or belief are believed to be true.

Respectfully submitted,

Earle Jennings

Reg. No. 44,804